

CLAIMS

1 A data recording method of performing data recording while properly using at least two respective divided recording areas on an optical recording medium in accordance with kind of data to be recorded,

 wherein in the case where it is detected that recording capacity of one recording area has become equal to zero, the area having a remaining capacity is assigned to the area where the remaining capacity has become equal to zero to thereby extend the one area to allow occupation ratio of the respective areas to be variable to separately record data different in kind.

2 The data recording method as set forth in claim 1,

 wherein boundary pointer indicating boundary between the respective divided two recording areas on the optical recording medium is recorded into management area except for the recording areas to extend the area by change of the boundary pointer.

3 The data recording method as set forth in claim 1,

 wherein in the case where mirror surfaces exist within a predetermined area from the innermost circumference and within a predetermined area from the outermost circumference of the optical recording medium in the process of initialization of the optical recording medium, data recording onto the optical recording medium and taking-out of the optical recording medium, areas corresponding thereto are caused to undergo

padding.

4 A data recording apparatus adapted for performing data recording while properly using at least two respective divided recording areas on an optical recording medium in accordance with kind of data to be recorded,

the data recording apparatus comprising area management means for performing management of remaining capacities of the respective recording areas, whereby in the case where it is detected that remaining capacity of one recording area has become equal to zero, the area having a remaining capacity is assigned to the area where the remaining capacity has become equal to zero to thereby extend the one area to allow occupation ratio of the respective areas to be variable,

thus to perform management of remaining capacities of the respective recording areas by the area management means to perform data recording while properly using the respective recording areas in accordance with kind of data to be recorded.

5 The data recording apparatus as set forth in claim 4,

wherein the area management means serves to record boundary pointer indicating boundary between the respective divided two recording areas on the optical recording medium into management area except for the recording areas to extend the area by change of the boundary pointer.

6 The data recording apparatus as set forth in claim 4,

wherein in the case where mirror surfaces exist within a predetermined area from the outermost circumference and within a predetermined area from the outermost circumference of the optical recording medium in the process of initialization of the optical recording medium, data recording onto the optical recording medium and taking-out of the optical recording medium, areas corresponding thereto are caused to undergo padding.

7 An image pick-up apparatus comprising recording means for recording, onto an optical recording medium, a moving picture video signal and a still picture video signal which are obtained by image pick-up means,

the recording means comprising area management means for performing management of remaining capacities of at least two respective divided recording areas on the optical recording medium, whereby in the case where it is detected that remaining capacity of one recording area has become equal to zero, the area management means serves to assign the area having a remaining capacity to the area where the remaining capacity has become equal to zero to thereby extend the one area to allow occupation ratio of the respective areas to be variable,

thus to perform management of remaining capacities of the respective recording areas by the area management means to record, by the recording means, the moving picture video signal and the still picture video signal which

are obtained by the image pick-up means into different recording areas on the optical recording medium.

8 The image pick-up apparatus as set forth in claim 7,

wherein the area management means serves to record boundary pointer indicating boundary between the respective divided two recording areas on the optical recording medium into management area except for the recording areas to extend the area by change of the boundary pointer.

9 The image pick-up apparatus as set forth in claim 7,

wherein the area management means is operative so that in the case where mirror surfaces exist within a predetermined area from the innermost circumference and within a predetermined area from the outermost circumference of the optical recording medium in the process of initialization of the optical recording medium, data recording onto the optical recording medium and taking-out of the optical recording medium, areas corresponding thereto are caused to undergo padding.